COMPARATIVE STUDY OF COMMERCIAL TAX AND VALUE ADDED TAX (VAT) IN CHHATTISGARH WITH SPECIAL REFERENCE TO BHILAI STEEL PLANT (YEAR 2005 TO 2011)

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BIBLIOGRAPHY

Proposed Synopsis for registration for Ph.D. with Pt. Ravishanker Shukla University, Raipur (Chhattisgarh)

SYNOPSIS

1. **Title of the thesis:**

Comparative Study of Commercial Tax and Value Added Tax (VAT) in Chhattisgarh with special reference to Bhilai Steel Plant (Year 2005 to 2011)

2. Introduction:

Value Added Tax (VAT) is now the most common form of consumption tax system used around the world.

With a view to making the tax structure simple and more transparent, the Government of India, Ministry of Finance, constituted an Empowered Committee of State Finance Ministers. The design of State level Value Added Tax (VAT) has been worked out by the Empowered Committee through several rounds of discussion. The Committee decided to implement VAT system with a common basic design.

The benefits aimed by the implementation of VAT included, inter-alia, eliminating the cascading effect by giving a set off for input tax as well as tax paid on previous purchase, abolishing other taxes such as turnover tax and surcharge, the overall tax burdens were to be rationalised and there would be self assessment by dealers.

As VAT is a State subject, the States were given freedom for making appropriate variations in their State level laws.

At the time of formation of Chhattisgarh State, the state has adopted the Madhya Pradesh Commercial Tax Act, 1994 by changing the name as Chhattisgarh Commercial Tax Act, 1994 (CGCT Act). The Government of Chhattisgarh repealed the CG Commercial Tax Act, 1994 and enacted the Chhattisgarh Value Added Tax Act (CGVAT Act), 2005 for implementation with effect from 1st April 2006.

The public sector of the country has got a significant contribution to the development of Indian economy. Steel Authority of India Limited (SAIL) is the leading steel-making company in India. Bhilai Steel Plant is one of the major Industry of Chhattisgarh State. It is flagship unit of Steel Authority of India Limited and manufacture of various Iron & Steel products. Bhilai Steel Plant contributes handsome amount in exchequer of state government since inception. During the year 2010-11 Bhilai Steel Plant has contributed to State exchequer an amount of Rs. 648.30 Crores towards Value Added Tax as against of total State receipts of Value Added Tax amounting to Rs. 4524.14 Crores. As such Bhilai Steel Plant contributes approximately 15% of total State receipts on account of Commercial Tax / Value Added Tax.

This analysis covers VAT implemented in different countries and Indian States. Although the principles of the tax are broadly the same everywhere, the rules are enacted and implemented differently in different countries and Indian states and this resulted the compliance burden on business varies considerably.

The purpose of this study is to provide data to help inform current tax policy and tax reform in the Chhattisgarh State in comparison to earlier Sales Tax Law. The study results enable governments to compare their tax systems on a like-for-like basis against relevant peer states. The wealth of data available on VAT in this study will enables a comparison on how this tax is implemented and administered and effect on the revenue of the government and effect on the major industry in the State. The study also suggests the way following which State Government can improve the practices followed in collection of tax and in turn improve in the tax collection.

3. **A brief review of the work already done in the fields:**

In this subject reference of work already done are as under:

3.1 **Comparative Study of Commercial Tax & Value added Tax (VAT) in India**

Author : Dr. R K Agrawal, Chartered Accountant
Reference : Ph.D Thesis submitted in Pt. Ravishankar University, Raipur, 2004

This study suggests a number forereaching implication for the formulation of appropriate policies on shifting of sales tax system to value added tax and its comparative position to generate more revenue for the state towards creation of batter financial strength on tax collection.

3.2 **A Study on Impact of Value Added Tax implementation in India**

Author : Dr. A. Jayakumar, Associate Professor and Former Controller of Examinations, Department of Commerce, Periyar University, Salem
Reference: Paper presented in International Business Research Conference held at Dhaka in 2011 WWW.wbiconpro.com

This study identifies the characteristic features of VAT and implementation domain. The study further determines the impact of VAT on satisfaction over the marketers as well as consumers and identifies the problems, prospects and suggestions for increasing effectiveness implementation of VAT in India.

3.3 **Present Scenario of VAT in India compare with Sale Tax**

Author : Surya Prakash, Research Scholar, Faculty of Commerce, Banaras Hindu University
Reference : The Indian Journal of Research “Anvikshiki”

Here the author is emphasizing upon implication of VAT, as it will enhance economic growth of the nation.

3.4 **State-Level Value Added Tax and its Revenue Implications in Indi a-A Panel Data Analysis**

Author : Mr. Damodar Nepram, Reader, Department of Economics, Manipur University
Reference : The Journal of Applied Economic Research : May 2011 : Volume 5 no. 2 pp 245-265

This paper highlights drawbacks of sales tax and giving new direction of the perceived role of taxation as a macroeconomic tool of recent tax reforms.

3.5 **Present Status of VAT in Maharashtra State**

Author : Mr. S.A. Khandre and Dr. V.V. Purohit, Dr. Sow. I.B.P. Mahila Kala Mahavidhyalay
Reference : International Referred Research Journal: Vol-II : Issue 18: March,2011 ISSN-0975-3486 RNI: RAJBIL 2009/300097

This paper has been written with the objective to Study the salient feature of the present Structure of VAT and revenue collection from VAT in Maharashtra and concluded that VAT should simplify the paper work, reduce transaction costs and time and should be user friendly. Further VAT System replaces the system of inspection by a system of built-in self-assessment by the dealers and auditing.

3.6 Value Added Tax and its Implication on Profitability

Author (s): Dr. Sunil Kumar, Prof. R. K. Sharma and Ms. Madhu Arora
Reference: IMS Manthan , The Journal of Management, Comp. & Science : Volume 5 Issue 2(Management)

Value added tax is comparatively easy from the state sales tax system but on the another hand chances of mal practices in this system are also less. This research work can be used as a tool for spreading awareness among the community for indirect tax.

3.7 Value-added tax options for India

Author (s) : Mr. Robin Burgess, Stephen Howes and Nicholas Stern
Reference: International Tax and Public Finance: Volume 2: No. 1: PP 10-141

Author is trying to giving special attention to the country's federal structure, as the consequences of adopting VAT or any tax change have effects on inflation, income distribution, resource allocation, economic growth as it depends upon the specific forms of tax and accompanying circumstances.

3.8 Analysis of Value Added Tax

Author : Mr Parikshit Singh,Symbiosis Societies Law College, Pune

In the changed scenario of globalization and changed methods of trade VAT has become inevitable. It is seen that VAT has simplified the paper work, reduce the cost time and burden of consumers and it is proved to be user friendly.

3.9 Is the value added tax naturally progressive?

Author (s): Mr. Glen P, Jenkins HJ, Chun YK
Reference: Queens Economics Department Working Paper, No. 1059.,2006

This paper aims at framing out VAT as a source of income for development and sustainability of economic growth of a nation with at most care and diligence.

3.10 Poverty and social impact analysis: A suggested framework.

Author : Mr. Hossain SM (2003).
Reference: IMF Working Paper, No. WP/03/195, October'2003

This paper throws some insight regarding social growth with comprehensive tax policy and its implicational efficacy.

4. **Objectives of the study:**

Objective of this work is to study the salient features of the present structure of VAT and revenue collection from VAT in Chhattisgarh. The main objectives of this study are as under:

1. To identify the characteristic features of VAT and its implementation in the various countries and Indian States.
2. To analyze various provisions of CG Commercial Tax Act and CG Value Added Tax.
3. To determine the impact of VAT on Chhattisgarh Government revenue
4. Measuring the impact of the CG Value Added Tax on Bhilai Steel Plant.
5. To identify the problems and prospects, lacuna on Governmental and Implementation domain.

5. **HYPOTHESIS:**

Through this study we will be able to assess the following aspects:

1. The implementation of Value Added Tax plays an important role on economy of state.
2. The Value Added Tax is simplify tax structure, created uniform common market within the country which is bring down prices and that would enable the producers of goods to reduce costs, face competition from abroad and to increase exports.
3. The Value Added Tax less affects the other taxes like Cenvat under Excise Act, Income Tax, Octroi, Terminal Tax, Entry Tax etc in comparison to commercial tax.
4. VAT is not burden to the manufacturer and it facilitates concession to manufacturer in an easier manner.
5. In comparison to Commercial Tax Act, Value added tax system has built-in self-assessment by the dealers and auditing as such the tax structure becomes simple and more transparent. This improves tax compliance.
6. Value Added Tax has helped the government to increase its revenue.

6. **Noteworthy Contribution in the field of proposed work**:

6.1The effect of Value Added Taxes on the Indian society

Authors(s): Mr. Ravindra Tripathi, Ms. Ambalika Sinha and **Ms. Sweta Agarwal ,**
Department of Humanities and Social Sciences, Motilal Nehru National Institute of Technology, Allahabad
Reference: Journal of Accounting and Taxation: Volume 3: No. 2: June 2011: pp. 32-39: ISSN 2141-6664

This study highlighted the importance and significance of value added tax in the Indian society, its socio-economic effects on difference sectors and the future prospect for manufacturing and service industries in India.

6.2 Issues in Tax Reforms

Author: Mr. Azizul Islam,
Former Chief of the Development Research and Policy Analysis Division, ESCAP
Reference: Asia-Pacific Development Journal: Volume 8: No. 1: June 2001

This study seeks to describe the principles that have guided recent tax reforms in Asian developing countries. It critically examines the purported rationale underlying these reforms and raises some issues connected with these reforms. The paper first discusses the new direction of the perceived role of taxation as a macroeconomic tool and the principles which have formed the basis of recent tax reforms. It then analyses the implications of the application of these principles for the level and structure of taxes.

6.3 Implementing VAT in India: Implications for Federal Polity

Author: Mr. Chanchal Kumar Sharma,
Assistant Professor, Maharaja Agrasen College, Kurukshetra University
Reference: The Indian Journal of Political Science:Volume LXVI:No. 4:December 2005: pp. 915-934.

This study attempted an analysis of the evolution of the structure of the VAT in India with reference to its revenue productivity. In view of reform in the structure and the coverage of value added tax, the study examined the revenue implications of the reform undertaken. It also put forth policy imperatives for the government.

6.4 Tax Reform in India: Achievement and Challenges

Author: Mr. M. Govinda Rao,
Director**,** Institute for Social and Economic Change, Bangalore
Reference : Asia-Pacific Development Journal Vol. 7, No. 2, December 2000

This paper analyses the evolution of the tax system in India since the early 1990s. The paper describes and assesses the introduction of new forms of direct and indirect taxes, their revenue and equity implications and the successes achieved in their implementation. The paper concludes that after eight years of reform improving the tax system remains a major challenge in India.

6.5 Conceptual Framework and Impact on Consumers & Business Community

Author: **Mr. Amit K. Chakrabarty,**
Head Department of Commerce, Katwa Bharati Bhaban, West Bengal
Reference: stvat.com

In this present paper the author analyzed the VAT, it's features, it's positive aspects, it's negative aspects, reaction among the business community, it's impact on consumers etc. and reach to the conclusion that in the purview of liberalization & globalization there is no alternative of VAT. By this new system of indirect taxation- the Consumer, the Trader and also the Govt. will be benefited by different ways instead of existing system of taxation i.e. Sales Taxation. VAT ensures transparency; reduce cascading effect of existing indirect taxation and also tax evasion.

6.6 Rate War, Race to the Bottom and Uniform State VAT Rates

Author: **Mr. R Sthanumoorthy,**
ICFAI Business School (IBS) Research Center, Chennai
Reference: Economic & Political Weekly Issue: VOL 41: No. 14: June 17-23, 2006

This paper makes a modest attempt to provide empirical evidence on these phenomena in the context of tax rate setting behavior of the southern states under the previous sales tax regime. The conclusions of the study are useful to arrive at an appropriate VAT rate structure for the states.

6.7 Value Added Tax a Review

Author : **Mr. Ashutosh Singh,**
Lecturer, Dept.of Management Studies, Amrapali Institute, Haldwani (Nainital), Uttarakhand
Reference: KKIMRC International Journal of Research in Finance and Accounting: Vol 01:No. 1 Sep-Nov'2011

This research work can be used as a tool for spreading awareness among the community for indirect tax.

6.8 Trends and Issues in Tax Policy and Reform in India

Author(s) : Mr. M. Govindan Rao and Mrs. R. Kavita Rao,
Professor**,** National Institute of Public Finance and Policy
Reference: National Council of Applied Economic Research: Indian Policy Forum: Volume 2, 2005-06

This paper is giving the insight regarding taxation policy as a source of revenue generation and social commitment.

6.9 Is the Value Added Tax Reform in India Poverty-Improving

Author: **Mr. Ajitava Raychaudhuri,** Jadhapur University,
Mr. Sudip Kumar Sinha,Govt of West Bengal-Deparment of Fiance(Revenue)
Ms. Poulomi Roy,Surendra Nath Colleg
Reference: PMMA working paper no. 2007-18, May'2007

This paper reveals taxation policy as a tool for poverty alleviation and there by rural economic growth can be attained.

6.10 Value Added Tax (VAT) in India–Opportunities and Challenges

Author: **Mr. Pradeep Kumar Singh**
Reference: BIMTECH: Vol 7: No. 1: Jan-June 2005: Journal published by Birla Institute of Management and Technology

In this paper the author aims at multi-point functionality of tax structure as a boon to Indian markets to become a developing economic destination.

6.11 A white paper on State level Value Added Tax

Author : **Government of India (2005)**,
Ministry of Finance, Empowered Committee of State Finance Ministers
Reference: Press Information Bureau, Government of India

This work highlights VAT as a state subject and its benefits for organized tax reforms.

7. **Research Methodology**:

Research is the systematic investigation into existing or new knowledge. It is used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories. A research project may also be an expansion on past work in the field. In order to test the validity of instruments, procedures, or experiments, research may replicate elements of prior projects, or the project as a whole. The primary purposes of basic research are documentation, discovery, interpretation, or the research and development of methods and systems for the advancement of human knowledge. Approaches to research depend on epistemologies, which vary considerably both within and between humanities and sciences. There are several forms of research: scientific, humanities, artistic, economic, social, business, etc.

The Research method is based on the collection of Primary data and Secondary data. They are as under-

1. **Primary Data**: Primary Data is the data which are not been previously published, i.e. the data is derived from a new or original research study and collected at the sources. It is information that is obtained directly from first hand sources by means of surveys, observation or experimentation. Primary Data can be collected through various methods like questionnaire, interview, and observation etc. In this research data will be collected through interaction, discussion with Tax Officials, Chartered Accountants, Tax Advocates and dealing officials of Value Added Tax matter in Bhilai Steel Plant. A questionnaire will be designed to collect the relevant information. The interview method of research, typically, involves a face to face meeting in which researcher (interviewer) asks an individual a series of questions.

2. **Secondary Data** : The secondary data will be collected from related websites, magazines, journal and textbook like Indian Economics Statistics, Reserve Bank of India, Empower Committee Reports, CAG Audit Reports (Revenue Receipts) for the various years etc.

3. **Analysis of Data** : Data so collected will be analysed with the help of statistical tool as per required, for example correlation, T-Test, Annova Test etc.

8. **Expected Outcome of the proposed work**:

- ✓ To know about the Commercial Tax and Value Added Tax in Chhattisgarh.
- ✓ Efforts made for effective implementation of Value Added Tax in Chhattisgarh.
- ✓ Impact of VAT on Producer, Traders, Consumers, Tax practitioner and Tax official.
- ✓ Measuring the impact of VAT on Bhilai Steel Plant.
- ✓ To Measure about the revenue receipts of the Chhattisgarh Government.

9. **Bibliography:**

Research papers /Professional Journals/ Books/ Articles/website :

1. Chittora B.K. (2005), VAT (VALUE ADDED TAX), Mark Publishers Jaipur (INDIA).
2. Kul Bhushan (2005), How to deal with VAT – (First Indian Print 2005), Pearson Education (Singapore) Pte. Ltd.
3. Lectures on value added tax act & CST act 2008, V.Subiah Naidu, Sitaraman & Co., Pvt.Ltd TNCTJ‟ S the tamilnadu value added tax act, 2006, Tamil Nadu act No. 32 of 2006 as amended by Tamil Nadu act no.21 of 2007, second edition, K.T.Nagabhushan Swamy, Naags Publications Chennai, sep.2007.
4. Nagabhushan swamy K.T. (2007), TNCTJS value added tax rates in Tamil Nadu, Fourth Edition, Naags Publications.
5. Nagabhushan Swamy K.T. (2008), TNCTJS value added tax practice and procedure in Tamil Nadu, First Edition Nags Publications.
6. McLure Jr.,Charles E. and McLure Jr.,Bloomfield, Mark A. Bloomfield (1987), The Value-Added Tax: Key to Deficit Reduction?, Washington ,D.C.
7. Zaidi,Neseem A.(2008), Sub-national Value Added Tax in India: Problems and Prospects, Bookwell Publications
8. Bhushan, Kul (2006), Working with VAT, Dorling Kindersley (India) Pvt. Ltd., Delhi, p.68.
9. Bickley, James M.(2003), Value added tax: concepts, policy issues, and OECD experiences, Novinka Books, New York, p. 3.
10. Bird, Richard Miller and Gendron, Pierre-Pascal (2007), The VAT in developing and Transitional countries, Delhi, Cambridge University Press. P. 141
11. Chandhoke,Neera and Priyadarshi, Praveen (2009), Contemporary India: Economy, Society, Politics, Pearson Publications, First Edition, New Delhi, p.34-35.
12. Dalton, Hugh (2003), Principles of Public Finance, Volume 1, Routledge Taylor & Francis Group,Oxon, UK, p. 4.
13. Datey,V.S., Article-Value Added Tax, http://www.icai.org/post.html?post_id=2452, viewed on 4/4/2011.
14. Deepashree (2007), General Economics For Ca Cpt, Tata McGraw-Hill, New Delhi, p. 13.6-13.7.
15. Ebrill, Liam P. (2001), The Modern VAT, International Monetary Fund, p. 1
16. Favaro, Edgardo M. and Lahiri, Ashok K. (2004), Fiscal Policies and Sustainable Growth in India, Oxford University Press, USA.

17. Gillespie, Andrew(2007), Foundations of Economics, Oxford University Press, New York, First Edition, p. 78-80.
18. Gupta, Alka (2001), Public Finance and Tax Planning, Anmol Publications PVT. Ltd., New Delhi, pp.147-148.
19. Gurumurthi, S. (2004), Value Added Tax Across the World, Vikas Publishing House Pvt.Ltd.,India
20. Isidore, Holaind (2009), Natural Law and Legal Practice: Lectures Delivered at the Law School of Georgetown University, BiblioLife, Pg. 258.
21. Joseph, R. (2005), Business Policy And Environment,Anmol Publications PVT. Ltd., New Delhi, p.407-408.
22. Koli, L.N. (2008), Ugc-Net/jrf/slet Commerce (Paper II), Upkar Prakashan, Agra, p.20U
23. Krishnan, V. S. (2006), Indirect tax reforms: challenge & response, Abhinav Publications, New Delhi, p. 153.
24. Kumar, N. and Mittal, R. (2002), Public Finance: Theory and Practice, Anmol Publications Pvt. Ltd., New Delhi, p. 56-57.
25. Moeti, Kabelo and Khalo, Tito and Mafunisa, John, (2007), Public Finance Fundamentals, Juta & Co. , Cape Town, South Africa, p.32.
26. Mukherjee, Sampat (2002), Economics for C.A. Professional Education Course 1, New Age International (P) Ltd. Publishers, New Delhi, p. 484.
27. Mukhopadhaya,Sukumar, Economics of Value Added Tax (Theory & Practice), Centax Publication
28. Narayan, B.N. (2002), Public Finance, Anmol Publications Pvt. Ltd., New Delhi, pp. 53,60-61 KKIMRC IJRFA Vol-01: No-01 Sep-Nov 2011
29. Value Added Tax A Review
30. Narayana, A.V.L. (1991), Operation of the Modified Value Added Tax, Vikas Publishing House Pvt.Ltd ,India
31. Purohit, Mahesh C(2001), Sales tax and value added tax in India, Gayatri Publications.
32. Purohit, Mahesh C(2001), Value added tax: Experiences of India and other countries, Gayatri Publications.
33. Raj, Radha (2008), Economic Environment of Business and Environmental Management, Nirali Prakashanarihant Printer, Pune, First Edition, p. 5.10-5.11
34. Ramani, V. V. and Kapoor,Sapna (2006), VAT: An Indian Experience, The ICFAI University Press.
35. Rao, Govind M (December 2000). TAX REFORM IN INDIA: ACHIEVEMENTS AND CHALLENGES, Asia-Pacific Development Journal, Vol. 7, No. 2

36. Rolfe,Tom (2008), Financial Accounting and Tax Principles, CIMA Publishing, UK, p. 7.
37. Schenk, Alan and Oldman, Oliver,Value Added Tax : A Comparative Approach
38. Shah, Anwar, Macro Federalism & Finance, IMF
39. Shahe, Emran M. and Stiglize,J., On selective Indirect Tax reform in Developing Countries,Stanford University and Columbia University.
40. Shrivastava, Mohan Prasad (2004), Economics of Value Added Tax, APH Publishing Corporation, New Delhi, p.41
41. Singh, Anurag (2004), Public Sector Reforms in India, A.P.H. Publishing Corporation, New Delhi, p. 13
42. Singh, Ramesh (2008), Indian Economy, Tata Mc-Graw Hill Publishing Co. Ltd., New Delhi, Second Edition, p.20.4
43. Tait, Alan A. (1988), Value-added tax: international practice and problems, International Monetary Fund, p. 4
44. TAX & RETAIL INVOICE, http://www.commercialtax.gujarat.gov.in/vatwebsite/vat/VatFAQMain.jsp?viewPageNo=10, viewed on 13/3/2011
45. Tax Reforms in India 1991-2001, Indian Tax Foundation, (2002)
46. UTTARANCHAL SHASAN VITTA, KAR AVAM NIBANDHAN VIBHAG NOTIFICATION, http://www.rushabhinfosoft.com/Webpages/State%20wise%20Act%20and%20Rules/Uttaranchal/Notification/VAT%20NOTIFICATIONS%20WITH%20NUMBERS.htm, viewed on 13/3/2011.
47. Virmani, Arvind (1986), Implications of a VAT in India: The deductibility system, Development Research Dept., Economics and Research Staff, World Bank
48. Zero Rated Areas, http://www.finance-glossary.com/define/zero-rated/1564/0/Z, watched on 4/4/2011

10. **List of published paper of the candidate**:

"Achieve sustainable growth through corporate social responsibility"
Published in an International Research Journal: **Lab to Land**: Vol.04: No. 13-A: January 2012
ISSN No. 0975-282X: Page 49-51

(Signature of the Supervisor) (Signature of Candidate)